

**ABSTRACT OF THE DISCLOSURE**

A VSB communication system comprises a VSB transmission system and a VSB reception system. The VSB transmission system multiplexes a coded MPEG data and a coded supplemental data having a null sequence inserted therein, with required multiplexing information included in a field synchronization signal or in a supplemental data according to a number of the supplemental data packets being transmitted. The VSB reception system detects the required multiplexing information from the field synchronization signal or the supplemental data and decodes the multiplexed data by using the null sequence and the detected multiplexing information, as well as demultiplexes the multiplexed data into the MPEG data and the supplemental data.